



- ☒ Drafts
- ☐ Pending
- ☒ Active

- ☒ L1: (24) predistortion near8 subsystem
- ☒ L2: (20) 1 and "component signal"
- ☒ L3: (20) 2 and "predistorted signal"
- ☒ L4: (17) 3 and combining
- ☒ L6: (6) 4 and decompos\$3
- ☒ L5: (17) 4 and decompos\$3
- ☒ L7: (444) 455/114.3 455/115.1 455/120-126 455/291-293 330/84
- ☒ L8: (10) 7 and (predistortion near5 subsystem).clm.
- ☒ L9: (9) 8 and "predistorted signal".clm.
- ☒ L10: (9) 9 and "predistorted signal".clm.
- ☒ L11: (9) 10 and combining.clm.
- ☒ L12: (3) 11 and decomposition.clm.

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- ☒ S1: (15) chireix near3 architecture
- ☒ S2: (9) S1 and predistortion
- ☒ S3: (9) S2 and (component adj signal)
- ☒ S4: (9) S3 and RF
- ☒ S5: (9) S4 and RF

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(54) PREDISTORTION CIRCUIT FOR A TRANSMIT SYSTEM

(52) U.S. Cl. 6051042, 6051043

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(57) ABSTRACT

Systems and methods related to amplifier systems which use a predistortion technique to compensate for nonlinear distortion in the system output signal. In signal processing, nonlinearities occur in input signal and distort the output signal. The present invention provides a predistortion technique to compensate for nonlinear distortion in the system output signal. The predistortion technique includes a phase correction, a signal rate modification, and a rate modification. The predistortion technique is applied to the input signal to produce a predistorted signal. The predistorted signal is then amplified by the amplifier system to produce an output signal. The output signal is then compared to the input signal to determine the distortion. The distortion is then used to adjust the predistortion technique to produce a more accurate output signal.

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(21) Appl. No.: 10/041,770

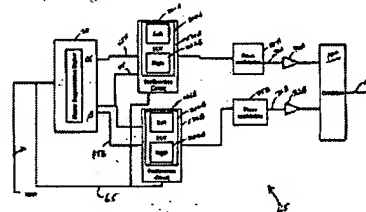
(22) Filed: Aug. 13, 2002

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Publication Classification

(51) Int. Cl. H03M 1/00



	U	1	Document ID	Issue Date	Pages	Title	Current OR	Current	Ref	Inventor	
1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	US 20050003770 A1	20050106	14	Predistortion circuit for a transmit system	455/114.3	455/114.2		Saad, Aryan	F
2	<input type="checkbox"/>	<input type="checkbox"/>	US 20050001678 A1	20050106	25	Adaptive predistortion for a transmit system with gain, pha	330/149			Saad, Aryan	F
3	<input type="checkbox"/>	<input type="checkbox"/>	US 20050001677 A1	20050106	23	Adaptive predistortion for a transmit system	330/149			Saad, Aryan	F

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